

WHAT IS CLAIMED IS:

1. A vented bag comprising
a bag body having side walls defining a cavity therebetween for holding material
therein and having an opening for accessing the cavity; and
5 a reclosable closure disposed at the bag opening and comprising
extruded male and female interlocking profiles extending along opposing
sides of the opening and constructed to releasably interlock; and
an extruded valve flange extending from one side of the closure to engage an
opposing surface of the closure when the profiles are interlocked;
10 the flange and opposing surface constructed to separate in response to pressure in said
cavity for venting the bag with the profiles interlocked.

2. The vented bag of claim 1 wherein the closure includes a first set of interlocking
profiles on one side of the valve flange and a second set of interlocking profiles on an
15 opposite side of the valve flange

3. The vented bag of claim 1 wherein the valve flange has a non-sealing surface
defining a groove extending into the flange along the length thereof, the groove defining a
reduced bending stiffness region of the flange.
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4. The vented bag of claim 1 wherein one of the extruded male and female
interlocking profiles is segmented to define the vent passage between longitudinally spaced-
apart portions thereof, the segmented profile defining arcuate notches therethrough

25 5. The vented bag of claim 4 wherein the segmented profile is the female
interlocking profile.

6. A method of filling and evacuating a bag, the method comprising
(a) providing a bag comprising
30 a bag body having side walls defining a cavity therebetween for
holding material therein and having an opening for accessing the cavity; and

a reclosable closure secured to the side walls at the bag opening, the closure comprising extruded male and female interlocking profiles extending along opposing sides of the opening and constructed to releasably interlock along opposite sides of the male profiles; and an extruded valve flange laterally spaced apart from the interlocking profiles and extending from one side of the closure to engage an opposing surface of the closure when the profiles are interlocked; the closure defining a vent passage extending from an air space between the opposing sides of the opening and between the interlocking profiles and the valve flange; the flange and opposing surface constructed to separate in response to pressure in said cavity for venting the bag with the profiles interlocked, and to increase a contact pressure therebetween in response to presence of a vacuum in said cavity;

(b) placing material into the cavity;
(c) sealing the bag; and then
(d) increasing air pressure within the cavity to expel air from the sealed bag through the vent passage of the closure.

7. The method of claim 6 wherein the closure includes a first set of interlocking profiles on one side of the valve flange and a second set of interlocking profiles on an opposite side of the valve flange.

8. The method of claim 6 wherein increasing air pressure comprises compressing opposing sides of the sealed bag to separate the valve flange and contact surface of the closure and push air contained within the cavity out of the bag through the closure.

9. The method of claim 6 further comprising, after expelling air from the sealed bag, releasing the opposing sides of the bag to re-engage the valve flange and contact surface of the closure and re-seal the bag.

10. The method of claim 6 wherein the material is placed into the cavity through the closure, between the interlocking profiles.

11. A method of forming a reclosable bag, the method comprising

(a) providing a closure comprising

a first closure strip comprising a first elongated base, a first extruded interlocking profile extending from the elongated base, and an extruded valve flange laterally spaced apart from the interlocking profile and extending from the elongated base; and

5 a second closure strip comprising a second elongated base, a second extruded interlocking profile extending from the second elongated base and configured to releasably interlock with the first extruded interlocking profile when pressed together, and a flange contact surface laterally spaced from the second extruded interlocking profile and configured to engage the valve flange of the first closure strip to form an air-tight seal therebetween
10 when the profiles are interlocked, with the closure defining an air space between the interlocked profiles and the valve flange;

wherein the valve flange is constructed to separate from the contact surface in response to pressure on a first side of the valve flange, and to be biased against the contact surface in response to presence of a vacuum on said first side of the valve flange;

15 (b) attaching the first and second elongated bases to bag film; and

(c) forming a bag from the bag film, with the bag defining a cavity for containing contents and the first side of the valve flange directed toward said cavity.

20 12. The method of claim 11 further comprising notching of the first and second interlocking profile to form a vent passage thereacross.

13. The method of claim 11 further comprising forming an air vent passage extending into the air space defined between the interlocked profiles and the valve flange.

25 14. The method of claim 12 wherein forming the air passage comprises piercing through one of the first and second elongated bases of the closure.

30 15. The method of claim 11 wherein the closure, as provided, defines an air vent passage extending into the air space defined between the interlocked profiles and the valve flange.